

Winchester early in the summer. Mr. F. G. Floyd has also a station for this peculiar-smelling "pineapple weed" in West Roxbury.

*Solidago sempervirens*, L. Abundant in an open grassy swamp in Winchester, at an elevation of about 200 feet. I have also collected it on the East Lexington meadows.

BOSTON, MASSACHUSETTS.

## THE VARIATIONS OF PRIMULA FARINOSA IN NORTHEASTERN AMERICA.

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*Primula farinosa* in its broad sense is a plant of very wide range, the typical form occurring in northern and mountainous districts of Eurasia and North America, while some representative of the species is found in nearly all cooler parts of the globe, even in Antarctic South America. The plant of eastern North America is very generally called true *P. farinosa*, and in Engler's *Pflanzenreich* nearly all the American plants are united by Pax and Knuth with the Eurasian plant as *P. farinosa*, subsp. *eufarinosa* Pax, var. *genuina* Pax.<sup>1</sup> As shown in the Gray Herbarium, however, there is very little American material which is clearly identical with the Eurasian type of *P. farinosa*. Instead, most of the material from the northeastern United States and adjacent British America is of two seemingly endemic varieties, while in the Rocky Mountains is a third which may be looked for with some confidence on the mountains of eastern Quebec. These three varieties and the Eurasian type of the species may be distinguished as follows.

\* Calyx in anthesis 3–5 mm. long; involucral bracts 3.5–6 mm. long.

*P. FARINOSA* L. Low, rarely 3 dm. high: leaves oblanceolate to narrowly obovate, *white-farinose* beneath: bracts lance-attenuate: *pedicels rarely equalling the calyx*: capsule 6–8 mm. long, slightly exserted.—Sp. i. 143 (1753).—Eurasia. Rare in America: examined only from Labrador and Newfoundland.

Var. *AMERICANA* Torr. Scape 1–2.5 dm. high: leaves oblanceolate

<sup>1</sup> Pax & Knuth in Engler, *Pflanzenr.*, iv. Fam. 227, 83 (1905).

or spatulate, rather stiff, covered beneath with *sulphur-yellow* powder: bracts as in the species: *pedicels elongate*, often 2 to 5 times as long as the calyx: capsule 5–8 mm. long, much exerted.—Fl. i. 213 (1824).—Shores of Lakes Huron and Michigan, Ontario and Michigan.

\* \* Calyx in anthesis 6–8 mm. long: bracts 6–11 mm. long.

Var. **macropoda**, var. nov. Planta 1–4.5 dm. alta; foliis spathulatis vel anguste rhomboideo-ovatis longe petiolatis, subtus farinosis; bracteis lineari-vel lanceolato-attenuatis; pedicellis elongatis (1–5 cm. longis); capsulis 9–12 mm. longis exertis.

Usually tall (1–4.5 dm. high): leaves from spatulate to narrowly rhombic-ovate, long-petioled, usually white-farinose beneath: bracts linear- or lance-attenuate, often involute in drying: pedicels mostly elongate (1–5 cm. long): capsule 9–12 mm. long, usually much exerted.—LABRADOR, Battle Harbor, July 18, 1891 (Bowdoin College Exped. no. 104): QUEBEC, Island of Anticosti (Pursh); wet limestone cliffs, Percé, August 17, 1904 (*Collins, Fernald and Pease*); banks of the St. Lawrence R., Matane, August 7, 1904 (*F. F. Forbes*); limestone cliffs and ledges, Bic, July 16, 1904 (*Collins & Fernald*), July 6–10, 1905 (*Williams, Collins and Fernald*), July 5, 1906 (*Fernald & Collins*, no. 243 — TYPE): NOVA SCOTIA, without locality (*MacCulloch*); dripping cliffs, Baxter's Harbor, July 10, 1900 (*F. G. Floyd*): MAINE, Mt. Kineo, August, 1866 (*A. H. Smith*), September 27, 1887 (*G. G. Kennedy*): KEEWATIN, a small green-leaved extreme, below high-water mark, shore of Hudson Bay, latitude 56°, August, 1886 (*J. M. Macoun*): SASKATCHEWAN, Carleton House (*Richardson*): ATHABASCA, "The Cascade," Athabasca R., June 15, 1892 (*Elizabeth Taylor*, no. 38): MACKENZIE, Great Slave Lake (*Richardson*).

Var. **incana** (M. E. Jones), n. comb. Scapes 1–3.5 dm. high: leaves oblong- to narrowly rhombic-ovate, short-petioled or subsessile: bracts linear-lanceolate, obtuse or acutish: pedicels in anthesis mostly shorter than the bracts, in fruit slightly elongated (rarely 2 or 3 cm. long).—*P. incana* M. E. Jones, Proc. Cal. Acad., Ser. 2, v. 706 (1895). *P. americana* Rydberg, Bull. Torr. Cl. xxviii. 500 (1906).—Rocky Mts., Alberta to Colorado and Utah.

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